Mr. W. H. Shillingford
Ford Electronics and Refrigeration LLC
4747 Western Avenue
Connersville, Indiana 47331

Re: 041-12053
First Minor Permit Modification to
Part 70 T041-6896-00004

Dear Mr. Shillingford:

Ford Electronics and Refrigeration LLC was issued a Part 70 Operating permit on February 17, 1999, for an automotive parts manufacturing plant. An application requesting changes to this permit was received on November 23, 1999. Pursuant to the provisions of 326 IAC 2-7-12 a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document and as follows (bold emphasis added to new language):

1. The description of the Thermal De-oiler #2 in Section A.2, Item (11), on Page 6 of the permit shall be revised as follows to indicate the increased capacity of the unit:

   (11) one (1) thermal de-oiler (De-oiler #2) processing a maximum of 2,400 pounds of metal parts per hour, using a maximum of ~~40~~ **66.1** pounds of oil per hour, with a thermal incinerator using natural gas as supplementary fuel at a heat input rate of ~~2.5~~ **2.3** MMBtu per hour for control of VOC, exhausting through one (1) stack (DO3);

2. The facility description of the Thermal De-oiler #2 at the beginning of Section D.4 on Page 46 of the permit shall be revised consistent with the changes in Item 1of this letter, above.

3. Condition D.4.1 (BACT Condition) on Page 46 of the permit shall be revised to be consistent with the changes to the Thermal De-Oiler #2 and its thermal oxidizer. This condition will still have operation of the thermal oxidizer associated with Thermal De-oiler #2 as a requirement of the permit based on the request made in a letter received from Ford Electronics and Refrigeration LLC on March 20, 2000. The revised condition shall be as follows:

   D.4.1 BACT Condition [326 IAC 8-1-6]
   Pursuant to 326 IAC 8-1-6 and CP-041-9441-00004, issued April 27, 1998, the thermal incinerators (rated at 7.5 MMBtu per hour and ~~2.5~~ **2.3** MMBtu per hour, respectively) on each of the two (2) thermal de-oilers (De-oiler #1 and #2) shall be in operation at all times that each of the de-oilers is in operation. When operating, the thermal incinerators on De-oiler #1 and De-oiler #2 shall maintain minimum operating temperatures of 1,500° F and 1,560º F, respectively, and a gas residence time in the oxidizing zone for each incinerator of 1.0 second, or a temperature and gas residence time determined in the compliance tests (described in Condition D.4.3) to maintain at least 95% destruction of VOC captured and a capture efficiency of 100%.

4. The stack testing requirements in Condition D.4.3 on Page 46 of the permit shall be revised to incorporate an additional stack test on the modified Thermal De-oiler #2 to verify the emission factor used for uncontrolled VOC emissions and demonstrate that the thermal oxidizer meets the requirements of the BACT condition (D.4.1). The condition shall be revised as follows to maintain the original testing language and add the additional testing requirement:

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

(a) Within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, the Permittee shall perform VOC testing on each of the two (2) thermal incinerators, controlling VOC emissions from the two (2) thermal de-oilers, to demonstrate compliance with Condition D.4.1 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

(b) **The Permittee shall perform an additional VOC test on the Thermal De-oiler #2 after modification as approved in Source Modification 041-11582. The testing shall be done to confirm the validity of the uncontrolled VOC emission factor used and demonstrate compliance with Condition D.1.4. The test shall be performed within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up of the modified unit.**

Note: Condition D.4.4 has been moved to a new Page 46a to provide room for the changes to D.4.3.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Janusz Johnson, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or at (800) 451-6027, press 0 and ask for extension (2-8325), or dial (317) 232-8325.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
JKJ
cc: File - Fayette County
U.S. EPA, Region V
Fayette County Health Department
Air Compliance Section Inspector - Warren Greiling
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT

Ford Electronics and Refrigeration LLC
4747 Western Avenue
Connersville, Indiana 47331

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T041-6896-00004	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 17, 1999

First Administrative Amendment No. 041-10719-00004, issued April 10, 1999.
Second Administrative Amendment No. 041-11046, issued August 5, 1999.

First Minor Permit Modification: 041-12053	Pages Affected: 6, 46 and 46a
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

(9) one (1) Evaporator Plate Fin B & B conveyorized vapor degreaser (ID No. 2DGR), using a maximum of 38.1 gallons of solvent per hour, with a carbon adsorption unit (ID No. ADSORB2) for control of volatile organic compound (VOC) emissions, and exhausting through one (1) stack;

(10) one (1) thermal de-oiler (De-oiler #1) processing a maximum of 6,000 pounds of metal parts per hour, using a maximum of 30 pounds of oil per hour, with a thermal incinerator using natural gas as supplementary fuel at a heat input rate of 7.5 million (MM) British thermal units (Btu) per hour for control of volatile organic compounds (VOC), exhausting through two (2) stacks (DO1 and DO2);

(11) one (1) thermal de-oiler (De-oiler #2) processing a maximum of 2400 pounds of metal parts per hour, using a maximum of 66.1 pounds of oil per hour, with a thermal incinerator using natural gas as supplementary fuel at a heat input rate of 2.3 MMBtu per hour for control of VOC, exhausting through one (1) stack (DO3).

(12) one (1) metal part spray cleaning operation (ID No. SPCL), using a maximum of 0.19 gallons of solvent per hour;

(13) one (1) compressor flushing and testing operation (ID No. FLUSH), using a maximum of 0.61 gallons of solvent per hour;

(14) one (1) induction brazing operation (ID No. BRAZING), using a maximum of 2.3 pounds of brazing flux solvent per hour;

(15) one (1) North Solder Line (ID No. SOLDER1), using a maximum of 14.5 pounds of solder flux solvent per hour; and

(16) one (1) South Solder Line (ID No. SOLDER2), using a maximum of 14.5 pounds of solder flux solvent per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22); and

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(10) one (1) thermal de-oiler (De-oiler #1) processing a maximum of 6,000 pounds of metal parts per hour, using a maximum of 30 pounds of oil per hour, with a thermal incinerator using natural gas as supplementary fuel at a heat input rate of 7.5 million (MM) British thermal units (Btu) per hour for control of volatile organic compounds (VOC), exhausting through two (2) stacks (DO1 and DO2); and

(11) one (1) thermal de-oiler (De-oiler #2) processing a maximum of 2400 pounds of metal parts per hour, using a maximum of 66.1 pounds of oil per hour, with a thermal incinerator using natural gas as supplementary fuel at a heat input rate of 2.3 MMBtu per hour for control of VOC, exhausting through one (1) stack (DO3).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 BACT Condition [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 and CP-041-9441-00004, issued April 27, 1998, the thermal incinerators (rated at 7.5 MMBtu per hour and 2.3 MMBtu per hour, respectively) on each of the two (2) thermal de-oilers (De-oiler #1 and #2) shall be in operation at all times that each of the de-oilers is in operation. When operating, the thermal incinerators on De-oiler #1 and De-oiler #2 shall maintain minimum operating temperatures of 1,500° F and 1,560º F, respectively, and a gas residence time in the oxidizing zone for each incinerator of 1.0 second, or a temperature and gas residence time determined in the compliance tests (described in Condition D.4.3) to maintain at least 95% destruction of VOC captured and a capture efficiency of 100%.

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each thermal de-oiler (De-oiler #1 and #2) and each of the thermal incinerators controlling VOC emissions.

Compliance Determination Requirements

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

(a) Within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, the Permittee shall perform VOC testing on each of the two (2) thermal incinerators, controlling VOC emissions from the two (2) thermal de-oilers, to demonstrate compliance with Condition D.4.1 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

(b) The Permittee shall perform an additional VOC test on the Thermal De-oiler #2 after modification as approved in Source Modification 041-11582. The testing shall be done to confirm the validity of the uncontrolled VOC emission factor used and demonstrate compliance with Condition D.1.4. The test shall be performed within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up of the modified unit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.4 Record Keeping Requirements

(a) The Permittee shall maintain records of the operating temperature and the gas residence time in the oxidizing zone for each of the two (2) thermal incinerators controlling VOC emissions from the two (2) thermal de-oilers.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Part 70 Minor Permit Modification.

Source Background and Description

Source Name:	**Ford Electronics and Refrigeration LLC**
Source Location:	**4747 Western Avenue, Connersville, Indiana 47331**
County:	**Fayette**
SIC Code:	**3714**
Operation Permit No.:	**T041-6896-00004**
Operation Permit Issuance Date:	**February 17, 1999**
Minor Permit Modification No.:	**041-12053-00004**
Permit Reviewer:	**Janusz Johnson**

The Office of Air Management (OAM) has reviewed a source modification (No. 041-11582-00004) for Ford Electronics and Refrigeration LLC relating to an expansion of the Thermal De-Oiler #2 and related thermal oxidizer.

History

A Minor Source Modification (041-11582-00004) for the expansion of the Thermal De-Oiler #2 and thermal oxidizer was issued on March 13, 2000. A Significant Permit Modification (041-11847-00004) to incorporate the source modification into the Part 70 Operating permit was drafted and public noticed on February 18, 2000. The Significant Permit Modification was significant due to a relaxation of the requirement to operate the thermal oxidizer based on emissions information from a stack test performed on the de-oiler prior to expansion. On March 20, 2000, Ford Electronics and Refrigeration LLC submitted a letter requesting that the requirement to operate the thermal oxidizer control for the De-Oiler #2 be left in the Part 70 Operating permit. This request has resulted in the withdrawal of the Significant Permit Modification No. 041-11847-00004. This Minor Permit Modification (041-12053-00004) replaces the withdrawn Significant Permit Modification.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the source modification application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 23, 1999, with additional information received on January 28 and March 20, 2000.

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Permit Modification. This permit modification is being performed pursuant to 326 IAC 2-7-10.5(e)(3)(B) and 326 IAC 2-7-12 to incorporate Minor Source Modification No. 041-11582-00004 into the Part 70 permit. The permit modification is considered to be a Minor Permit Modification under 326 IAC 2-7-12(b)(1)(B)&(C) because it does not involve significant changes to existing monitoring and record keeping requirements in the Part 70 permit and it will not change a case-by-case determination of a standard (326 IAC 8-1-6).

State Rule Applicability

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

The thermal de-oiler (De-oiler #2) will be considered subject to the requirements of 326 IAC 8-1-6. This rule requires all facilities constructed after January 1, 1980, which have potential VOC emission rates of 25 or more tons per year, and which are not otherwise regulated by other provisions of 326 IAC 8, to reduce VOC emissions using Best Available Control Technology (BACT). The modified thermal de-oiler will be assumed to have potential VOC emissions greater than 25 tons per year based the letter submitted by Ford Electronics and Refrigeration LLC on March 20, 2000. The previous BACT determination for the Thermal De-Oiler #2 in CP-041-9441-00004, issued April 27, 1998, will be applicable to the modified de-oiler and new thermal oxidizer.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Because the applicability of 326 IAC 8-1-6 has not changed, the requirement to operate the thermal oxidizer control system for the modified Thermal De-oiler #2 will remain in the permit. Therefore, the compliance monitoring and reporting requirements associated with the emission unit control will also remain in the permit.

Conclusion

The operation of the modification to the Thermal De-Oiler #2 approved for construction by Minor Source Modification No. 041-11582-00004 shall be subject to the conditions of the attached proposed **Part 70 Minor Permit Modification No. 041-12053-00004.**